

ABSTRACT

In embodiments, methods of determining a size of an annulus in a wellbore include: (a) displacing a fluid comprising reflective particles downhole and up through the annulus, wherein the reflective particles make a front end of the fluid visible as it exits the wellbore; (b) determining a total volume of the fluid displaced into the wellbore by detecting the reflective particles exiting the wellbore; and (c) calculating the size of the annulus based on that total volume of the fluid. The fluid may include a drilling fluid, a cement slurry, a spacer fluid, or combinations thereof. The reflective particles may include polymeric beads. In additional embodiments, drilling fluids, spacer fluids, cement slurries and combinations thereof comprise an effective amount of reflective particles to ensure that the fluids are visible when they exit a wellbore.